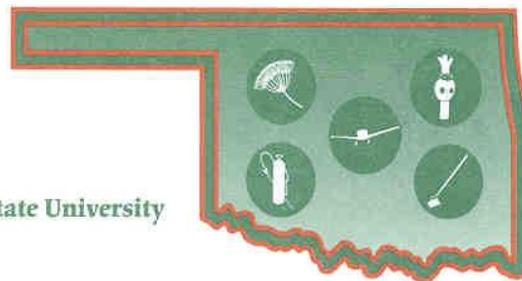


# PESTICIDE REPORTS

Division of Agricultural Sciences and Natural Resources • Oklahoma State University  
<http://pested.okstate.edu>



## JULY 2009

## CHEM

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## EPA REJECTS STATE CONCERNS

At a SFIREG POM meeting, state pesticide regulatory agencies strongly objected to proposed label wording on pyrethroid insecticides used for termite pretreatments.

The proposed wording was “The applicator must insure the treatment site is covered. The applicator can cover the soil him/herself or notify the contractor on the site that: 1) if the concrete slab cannot be poured over the treated soil within 24 hours

of application the treated soil should be covered with a waterproof covering (such as polyethylene sheeting), and 2) that the contractor should cover the treated soil if precipitation occurs before the concrete slab is poured.” The state regulatory agencies said this was unenforceable. EPA replied that due to a court decision this was enforceable language and that the proposed wording would be on all pyrethroid pretreat termiticides.

Another proposed wording was also opposed by the state regulatory agencies. This wording was “Do not apply within 10 feet of storm drains. Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes; reservoirs; rivers; permanent streams; marshes or natural ponds; estuaries; and commercial fish ponds).” This wording includes applications where French drains exist or other types of drains or where these drains empty within 10 feet of a storm drain. This also includes applications to commercial sites.

For both of these proposed statements EPA informed the states that the statements would be on all pyrethroid termite pretreatment labels. (OSU PSEP)

## PERMETHRIN RED CHANGES

EPA announced its decision to modify the 2006 Reregistration Eligibility Decision

(RED) for permethrin based on revised occupational and residential risk assessment.

One major revision was the reduction of the dermal absorption factor relied upon in the cancer portion of the occupational and residential exposure risk assessment from 15% to 5.7%.

Some of the changes will be that all products used for wide area outdoor broadcast application including agricultural crops, golf courses, nurseries, and sod farms will be Restricted Use. The PPE requirements will be strengthened.

Regarding the proposed wording not allowing application when precipitation was forecast now reads “Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area.”

EPA retained their wording for termite pretreatment regarding the contractor and application within 10 feet of a storm drain.

For agricultural uses the label will require Vegetative Buffer Strips. The wording for Vegetative Buffer Strips is “Construct and maintain a minimum 10-foot-wide vegetative filter strip of grass or other permanent vegetation between the field edge and down gradient aquatic habitat (such as, but not limited to, lakes; reservoirs; rivers; permanent streams; marshes or natural ponds; estuaries; and commercial fish ponds).” “Only apply products containing permethrin onto fields where a maintained vegetative buffer strip of at least 10 feet exists between the field and down gradient aquatic habitat.” The wording goes on to recommend using NRCS’s buffer strip guidelines.

An interesting item is that 70% of permethrin’s 1.5 million pounds is used on non-agricultural settings. Of this 70%, 55% is used by professionals; 41% by homeowners; and 4% in mosquito abatement districts. Agriculture accounts for 600,000 pounds.

EPA did not find a connection between permethrin/pyrethrin exposure and allergies/asthma. (Federal Register, June 10, 2009 and EPA e-mail June 19, 2009)

## **FMC FILES OBJECTIONS TO CARBOFURAN TOLERANCE REVOCATIONS**

FMC announced plans to file objections to EPA’s plan to revoke all food tolerances for carbofuran (Furadan).

FMC questioned the switch in focus from registration cancellation to tolerance revocation while continuing to defend the use of carbofuran. In March, FMC Chairman and CEO William Walter wrote EPA Administrator Lisa Jackson, pressing for continued use.

But that plea was to no avail. In addition to its plan to revoke all food tolerances, EPA also said it plans to proceed to canceling all remaining uses of carbofuran once the tolerance revocations are resolved.

CropLife America President and CEO Jay Vroom criticized EPA’s move to proceed with revoking tolerances before dealing with registered uses, noting it “is completely out of phase with traditional regulatory process.”

Jim Fitzwater FMC spokesman said FMC concurs with Crop Life America. “Using this path, EPA no longer has to consider the views of growers or even other federal agencies including USDA,” he said.

But EPA defends its action, noting there is no statutory requirement that says use cancellations must precede tolerance revocations.

According to the agency, the focus of tolerance revocation is dietary risk, which must meet the safety standard under the Federal Food, Drug and Cosmetic Act, while the use cancellation process focuses on

dietary risk in addition to occupational and ecological risks that must meet the FIFRA risk-benefit standard.

“The overall timetable to complete the cancellation and FFDCA process are comparable; however, by starting with the FFDCA process, protection of children from dietary risk will be realized sooner,” EPA spokesperson Dale Kemery said.

“Since all issues would be addressed in a FIFRA cancellation hearing, EPA was concerned that participants [in such a hearing] might be misled into believing that benefit consideration would be relevant to determining whether a use could be retained, even though it did not meet the FFDCA safety standard [regarding dietary risks]. In such a situation, any presentation on benefits would be a waste of time and money for all participants.”

At the SFIREG meeting state lead agencies strongly expressed their concern for the process EPA has taken in revoking the carbofuran tolerances and providing a short use period for existing stock.

The state regulatory concerns are that if residues are detected it is now under FDA regulation and not EPA. The state regulatory agencies would have to back track to the grower to verify if the application was made while there was a legal product to use. This can be done with carbofuran since it is a RUP. If the product was not a RUP most states do not require farmers to keep any application records. EPA’s response was that farmers should keep records anyway. (Pesticide & Toxic Chemical News, Vol. 37 No 28, May 18, 2009; OSU PSEP)

## **MORE ON CLEAN WATER ACT**

The 6<sup>th</sup> Circuit Court has granted a stay to EPA’s request. The stay is until April 9, 2011.

EPA requested a stay arguing against the National Cotton Council’s petition to the court to rehear the case. EPA’s reasoning was that the court ruling only applied to pesticides applied to or over water. The NCC and others believe the court’s ruling applies to any pesticide application made outdoors.

It is not clear what the ruling actually means and will likely be decided in court.

EPA will continue to develop a general NPDES permit process for pesticide applicators.

In a related manner, Senator Max Baucus (D-MT) is working on legislation to exempt pesticide spraying activities from water act permit requirements. However, this proposed exemption is facing opposition from environmentalist and has not won support from other Democrats on the Senate environment committee.

The bill is S. 787 and would add pesticide application to a list of activities exempt from the discharge standards in section 402 of the water law.

OSU PSEP attended the SFIREG meeting and EPA provided an update.

Basically, EPA is developing a General Permit for the four states that do not have NPDES permitting authority. Oklahoma does have permitting authority. For those states with permitting authority the permitting agency can develop the NPDES or adopt EPA’s General Permit. If the state develops its own permitting the limitations can be numeric or based on the decision of the person writing the permit decision. Presently, it is not clear which agency may do this in Oklahoma because ODAFF has the permitting authority for CAFOs and DEQ for other NPDES’. (American Association of Pesticide Safety Educations e-mail, June 6, 2009 and June 4, 2009)

## **CHANGES TO WPS AND C&T**

EPA has been working on changes to the Worker Protection Standard. EPA is not planning to release the proposed changes in early 2011.

Previously, EPA had talked about including non-agricultural applicators under WPS regulations. This could include lawn care and all commercial residential applicators.

EPA is also proposing changes to the Certification & Training requirements. This is the set of regulations that states follow in determining applicator categories and testing procedures.

Some of the changes proposed are new categories and possible making test more stringent. (Pesticide & Toxic Chemical News, Vol. 37 No 28, May 18, 2009 and OSU PSEP)

## **PESTICIDE CERTIFICATION 1987-2004**

EPA released data on initial and recertification of private and commercial applicators from 1987-2004.

Some interesting trends are that for Oklahoma there is an increase in both private and commercial recertification. This compares to a decreasing trend nationally.

For initial certification, Oklahoma appears to be steady while nationally the trend is downward. Nationally, commercial applicator initial certification has exceeded private initial certification since 2001. All previous years private initial certification exceed commercial initial certification.

For Oklahoma, there is approximately 30,000 certified applicators listed in 2004 divided equally between private and commercial.

You should know that both ODAFF and PSEP funding is based on national and state certification numbers. (OSU PSEP).

## **OOPS**

Marin County (CA) officials who have boasted about their “pesticide-free” approach toward maintaining county parks and public areas are having to eat a little crow.

A Corte Madera man reviewed the county’s own records and gave supervisors a report showing county crews have been using, by a conservative accounting, hundreds of gallons of chemicals while Marin has been taking credit for significantly limiting its use of such pesticides.

County staff has called it “an unfortunate oversight,” caused by confusion over whether the county’s no-spray rules should follow state or federal definitions of the potential carcinogenic hazards of the pesticides being used.

County supervisors have tired to spin the issue, stressing that despite breaking the county’s own policy, the amount of pesticides used has been far less than that applied by other jurisdictions or even Marin homeowners.

County officials point out that the pesticides used by the crews are readily available at local stores.

County staff said it relied on products listed under state Proposition 65 rules rather than a broader listing complied by EPA. The county law identifies the EPA list as the standard the county should be using.

This was not a one-time goof. There were more than 90 incidents over three years. (Marin Independent Journal, June 14, 2009)

## **IPM DEFINITION**

In an article by Beyond Pesticides/National Coalition Against the Misuse of Pesticides, they stated that

“Intrinsic to an IPM program is pesticide use reduction and elimination strategies that protect children and staff from unnecessary pesticide use and exposure at schools, while at the same time eliminating pest problems.” This statement was made in regards to Virginia not requiring certain regulations as proposed by NRDC. (School Pesticide Monitor, Vol. 9 No 3 2009)

## NICOTINE CANCELLED

EPA has granted the request to voluntarily cancel nicotine. This is the last registration for nicotine in the U.S.

The lone remaining product is Fulex Nicotine Fumigator (EPA Reg. No 1327-41). This is a greenhouse use product.

All sale and distribution of nicotine must cease December 31, 2014.

Those with existing stock after December 31, 2014 may use the existing stock until it is depleted. (Federal Register, June 3, 2009) **Note:** Another natural product is voluntarily canceled. Also its oral LD<sub>50</sub> is 50.

## TOXICOLOGIST RATE CHEMICAL RISK

The overwhelming majority of toxicologist responding to a recent poll say that environmental groups overstate the risks of chemicals, the media does a poor job of reporting chemical studies, and that controversial substances such as bisphenol A, phthalates and Teflon are less hazardous than mainstream news coverage would have the public believe.

The survey, conducted by the Statistical Assessment Service (STATS) and the Center for health and Risk Communication at George Mason University was completed by about one quarter of the Society of Toxicology’s 3,600 “full” members, drawn from government, industry, academia and environmental groups. It covered attitudes about the safety of groups of chemicals, the

risks of specific chemicals, the adequacy of government regulation, the soundness of media coverage and the accuracy of risk portrayals by environmental and industry groups, government agencies and professional societies.

Of the respondents – who could select “agree,” “disagree” or “not sure” – 55% agree that pesticides pose a significant health risk (43% disagree) and 53% believe that chemicals cause endocrine disruption (35% do not). At the same time, 87% disagree that organic or natural products are safer (10% agree) and 89% disagree that the safety of most chemicals can be determined without animal testing (10% agree). A meager 6% believe that any chemical exposure level is unacceptable (92% disagree and 18% believe that any level of chemical in the body, as detected by biomonitoring, shows a health risk (81% disagree).

When presented a list of chemical substances and asked whether they posed a high, moderate or low risk (“not sure” was again an option), only smoking tobacco and chewing tobacco were considered highly harmful by a solid majority (88% and 70% respectively). The rest of the chemicals proved fairly divisive, with the results suggesting that toxicologist do not share the concerns of activist groups and policy makers vis-à-vis certain controversial substances.

Bisphenol A, for example is considered to be a high risk by only 9% of responding toxicologists, while 39% consider it to be of moderate risk and 37% consider it to be of low risk.

Survey respondents see a bias among environmental groups, with a majority saying the risks of chemicals are overstated by Greenpeace (96%), People for the Ethical Treatment of Animals (80%), the Environmental Defense Fund (85%), the Environmental Working Group (79%), the Natural Resources Defense Council (79%)

and the Center for Science in the Public Interest (79%). A bias was also perceived among industry groups, with 57% of respondents saying the American Chemistry Council understates the risks (41% say ACC's portrayal is accurate).

Respondents placed greater confidence in the risk portrayal of government and international agencies, with a majority saying accurate information is given by the World Health Organization, the National Science Foundation, USDA, FDA, the Centers for Disease Control and Prevention, and the National Institute of Environmental Health Sciences, among other agencies. Only EPA and the Consumer Product Safety Commission were seen as portraying chemical risks accurately by a minority of respondents, with 41% saying EPA overstates the risks and 19% saying it understates the risks and 36% saying CPSC overstates the risks and 17% saying it understates them.

Media groups were seen by the overwhelming majority of respondents as doing a "poor" job seeking diverse views to balance a story (90%); explaining risk-benefit tradeoffs (95%), explaining "the dose makes the poison" (96%), and distinguishing correlation from causation (96%), among other transgressions.

The survey was immediately criticized by environmental groups such as NRDC and the EWG, both of whom said STATS must disclose more information about respondents' employment situation in order to put their views in perspective. (Pesticide & Toxic Chemical News, Vol. 37 No 29, May 25, 2009)

## **WHEAT GROUPS SEEK SYNCHRONIZED GMO RELEASE**

Wheat industry organizations in the U.S., Canada, and Australia announced that they will work toward the synchronized

commercialization of biotech traits in wheat varieties.

Noting that none of the groups holds a veto over the actions of others, they say it's in the best interest of all three producer communities to introduce biotechnology in a coordinated fashion to minimize market disruption.

Noting that biotechnology is not the only answer to a host of agronomic questions facing wheat production, the groups agreed it could be a "significant component" to tackling major issues facing the industry. The united front also is intended as an invitation to biotech companies to push forward with the development of biotech wheat varieties.

In addition to NAWG, organizations in the U.S. signing onto the statement include U.S. Wheat Associates and the North American Millers' Association. Canadian signatories include Grain Growers of Canada, Western Canadian Wheat Growers Association and Alberta Winter Wheat Producers Commission. Australia signatories include Grains Council of Australia, Grain Growers Association and Pastoralists and Grazers Association of Western Australia (Inc.).

The Canadian Wheat Board won't support biotech wheat until key conditions are in place, including assurances that its overseas markets would accept the crop. The Wheat Board holds a government-granted monopoly on sales of Western Canada's wheat and barley. (Pesticide & Toxic Chemical News, Vol. 37 No 29, May 25, 2009)

## **UPDATE ON GMO ALFALFA**

The U.S. Circuit Court of Appeals for the Ninth Circuit has reaffirmed an injunction ordered by the U.S. District Court for the Northern District of California against cultivation of Genetically

Engineered Herbicide Resistant Alfalfa (GEHRA) until the USDA Animal and Plant Health Inspection Service (APHIS) completes the preparation of an environmental impact statement.

The injunction was sought by plaintiffs Geertson Seed Farms and others, together with environmental groups "...because they fear cross-pollination of the new variety with other alfalfa."

APHIS announced January 7, 2008 its intent to prepare an environmental impact statement. (Food Industry Environmental Network, June 24, 2009)

## **EXPOSURE TO CHLORPYRIFOS**

EPA reported on poisoning incident data for chlorpyrifos in their October 15, 2008 memorandum using their Incident Data System IDS.

EPA did not use incident data from the American Association of Poison Control Centers Toxic Exposure Surveillance System, the California Pesticide Illness Surveillance Program, and the National Institute of Occupational Safety and Health's Sentinel Event Notification System for Occupational Risks.

Fifty-two percent of the incidents occurred with homeowner products while 27% were from pest control use and 21% from agricultural uses of chlorpyrifos.

California, Florida, Texas, Illinois, and Ohio were the leading states with poisoning incidents.

Sixty-three percent of the incidents in CA were due to PCO and agricultural products; 27% of the Florida exposures were due to PCO and agricultural products; 40% in Texas; 25% in Illinois; and 28% in Ohio.

Most incidents occurred in June, August, May, July and September respectively. This should be expected as these would be the months with most insect activity in the U.S.

The average age of those exposed was 43 years with the range being from three (3) months to 88 years of age. (October 14, 2008 EPA-OPP Memorandum)

## **USE OF BORATES**

We have had a number of telephone inquiries regarding the use of borates for termite management on buildings being constructed. The questions are: Can it be called a pretreatment in Oklahoma and can it be done legally in Oklahoma and can?.

The answer to can it be called a pretreatment is no according to ODAFF. By regulation a pretreatment is the application of a liquid termiticide to the soil. Borate applications to cellulose construction material above the soil is not a pretreatment.

As to can borates be used, the answer is yes. However, the applicator cannot call the treatment a pretreatment and must note on the contract that the treatment did not conform to minimum standards for post construction as required by rule but instead were performing the variation for a complete treatment that is specifically allowed by the termiticide label (see OAC 35:30-1-70).

## **AERIAL APPLICATION OF RODENTICIDE**

The U.S. FWS worked with Bell Laboratories to apply a special brodifacoum bait to Rat Island in the Aleutians. This was needed because the rats, which were introduced after a 1780's shipwreck, were decimating the native bird populations. Rats had wiped out the puffins, auklets and storm petrels on the island.

Helicopter pilots applied 25 tons of brodifacoum pellets on the 10-square mile island and then applied another 25 tons a week later.

The pellets were specially formulated so they would fall to the island and not degrade in the high humidity. They were also larger

than normal to prevent birds from ingesting them.

Bell Laboratory and FWS personnel will evaluate the project over the next two years. (The Bell Report, Vol. 28, No 2, April-June 2009)

## **STUDY SUGGEST HERBICIDES LINKED TO PANCREATIC CANCER**

A study published in the *International Journal of Cancer* found the herbicides pendimethalin and EPTC may be associated with pancreatic cancer.

However, the researchers from the National Cancer Institute, Northwestern University, the National Institute of Environmental Health Sciences and the Uniformed Services University of the Health Sciences caution that because the findings are the first to associate the two herbicides with pancreatic cancer, they “should be considered hypothesis generating and in need of confirmation.”

The researchers conducted a “case-control analysis” of the Agricultural Health Study cohort. This large prospective cohort includes more than 89,000 participants, including pesticide applicators and their spouses living in Iowa and North Carolina during the 1993-1997 study enrollment period.

The study’s analysis identified 93 cases of pancreatic cancer, with 64 in pesticide applicators and 29 in their spouses. Controlling for the risk factors of age, smoking and diabetes, the researchers “found statistically significant exposure-response associations for pendimethalin and EPTC on pancreatic cancer risk among pesticide applications in the AHS cohort.”

Asserting that the mechanisms by which the two herbicides may be linked to pancreatic cancer are unknown, the

researchers do note that pendimethalin contains N-nitroso-compounds or nitrosamine impurities while EPTC is able to form N-nitroso compounds.

“Nitrosamines are potent animal carcinogens and are considered suspected human carcinogens,” the researchers write. “Nitrosamine compounds, such as those found in tobacco products, have been implicated as significant causes of cancer, including pancreatic cancer.”

The researchers note, however, that three other pesticides – trifluralin, atrazine and dicamba – which also are able to form N-nitroso compounds, were not associated with pancreatic cancer. (Pesticide & Toxic Chemical News, Vol. 37 No31, June 8, 2009)

## **HOMEOWNER RECOMMENDATIONS**

Businesses with sales clerks need to be sure their sales people understand what the pesticide is intended to be used for by the customer.

We have received several telephone calls from homeowners who have bought product recommended by the sales person for gardens. After application the homeowner reads the label and discovers the pesticide does not have vegetables or the vegetables that were treated on the label. Our response has to be that the homeowner cannot eat those vegetables because the pesticide was misapplied – to a site/crop not on the label.

It does not make any difference if other products of the same active ingredient can be used on those vegetables, the product used was not labeled for that use.

Retail outlets need to take extra steps to ensure that their customers purchase the pesticides they need for the situation. (OSU PSEP)

## **NOZZLE DIRECTIONS CHANGING**

Bob Wolf with K-State has informed us that labels will be changing the way they specify nozzle types.

Presently, the labels are specifying a certain Volume Mean Diameter (VDM) like 500 $\mu$  (microns). Bob informed us that the registrants will move to using the ASAE classification system of very fine, fine, medium, coarse, very coarse, and extremely coarse in the future. (e-mail May 22, 2009)

## **OKLAHOMA AG PLANES**

In mid-March of this year we reviewed the type of planes and number of planes that were recorded with ODAFF on the Aerial Applicator License renewal form.

At that time there were 120 planes listed in use. Ag Tractors were the predominant type (55) listed followed by Cessna (19), Thrush (14), Piper's (8), Ag Cat (7), Bell (8), Heller (4), Dromider (2) and one Weahterly.

The overall average number of planes by a licensee was 1.6 and those in Oklahoma averaged 1.5 planes per licensee.

Nine other states were licensed in Oklahoma. They are AR, IL, KS, LA, MS, ND, NE, TX and VA.

Planes connected to Oklahoma licensed companies represented 44% of all planes. (OSU PSEP)

## **POOL CHEMICAL EXPOSURE**

The Center for Disease Control released a report on exposures due to pool chemical usage.

They reported on the New York State Department of Health reporting from 1983-2006 and the National Electronic Injury Surveillance System (NEISS) from 1998-2007.

Over 23 years NY reported 36 incidents. Thirty-six percent occurred at schools or colleges, 28% at membership clubs, 17% in housing complexes or hotels, and 14% in community aquatic facilities, and 6% at institutions.

Fourteen percent involved direct exposure to either chlorine bleach or acid, 86% resulted from exposure to chlorine gas and 87% of these were caused by exposure to chlorine gas generated by mixing incompatible pool chemicals, most frequently chlorine bleach and acid.

The NEISS reported the cause of exposure was 33% inhaled chemical fumes when opening pool chemical containers and 19% was due to eye injuries from pool chemicals splashing. The NEISS report had an exposure rate of 1.5 per 100,000 population. (CDC Mortality & Morbidly, May 15, 2009)

## **DUMB & DUMMER**

Three Citrus Heights families are without a home after an explosion rocked their apartment complex apparently because one of the tenants was tired of the cockroaches.

The Sacramento Metro Fire Department says nearly a million dollars in damage was caused when Tone Pina set off a number of bug bombs in his apartment.

“He told me the pests were getting on his kids at nighttime and he just wanted them gone and I can understand that,” said Sacramento Metro Fire Captain Christian Pebbles.

Tone says he used 8 to 10 foggers, but Sacramento Metro Fire says they found evidence of up to 18 bug bombs in an apartment that called for one or two at the most.

The foggers somehow found an ignition source, possibly the refrigerator, causing an explosion that left the building with serious structural damage. Sac Metro Fire says the force of the blast caused the wall to become disconnected from the roof and blew out the windows sending glass flying.

Fortunately, no one was hurt.

Despite the explosion and bug bombs, live cockroaches can still be seen in the apartment. (Sacramento Television Stations, Inc. CBS 13, June 22, 2009)



Jim T Criswell  
Pesticide Coordinator

# PESTICIDE APPLICATOR TEST SESSIONS 2009

All 23 exams will be available at each session. **PLEASE MAKE SURE** you know in advance which specific exam(s) you need to take (e.g. Service Tech, Ornamental & Turf, Core, Right-of-way, General Pest, etc.).

**RESERVATIONS ARE NOT REQUIRED FOR THESE TEST SESSIONS; they are all open to anyone wishing to test for certification. Tests are \$50.00 each; please bring check, money order or the exact amount of cash needed for testing, along with a form of photo ID. There is no fee for government employees in the discharge of their official duties.**

Unless otherwise noted, sessions are located as follows:

ALTUS	WESTERN OK STATE COLLEGE 2801 N MAIN, RM A23
ENID	GARFIELD CO. EXT OFFICE 316 E. Oxford
GOODWELL	OKLA PANHANDLE RESEARCH & EXT CENTER Rt. 1 Box 86M
HOBART	KIOWA CO. FAIRGROUNDS Exhibit Building
LAWTON	GREAT PLAINS COLISEUM Annex Rm 920 S. Sheridan Rd.
McALESTER	KIAMICHI TECH CENTER on HWY 270 W of HWY 69
OKC	OKLA CO. EXT 930 N. Portland, Auditorium - <u>Park &amp; enter</u> from the North side
TULSA	NE CAMPUS OF TCC 3727 E. Apache (Apache & Harvard) Engineering Tech Rm. 127

**If you have any questions, please call (405) 522-5950 or e-mail**  
**[eva.landeros@oda.state.ok.us](mailto:eva.landeros@oda.state.ok.us)**

**Testing will begin at 9:00 am. NO NEW APPLICANTS WILL BE ACCEPTED AFTER  
11 AM.**

**ALL TESTS must be completed by 1:00 pm**

# 2009 Test Sessions

## JULY

6 OKC  
9 TULSA  
20 OKC  
23 TULSA

## OCTOBER

1 HOBART  
8 TULSA  
12 OKC  
19 ALTUS  
22 TULSA  
26 OKC

## AUGUST

10 OKC  
13 TULSA  
27 TULSA  
27 ENID  
31 OKC

## NOVEMBER

3 GOODWELL  
5 TULSA  
5 HOBART  
5 OKC  
12 LAWTON  
19 TULSA  
23 OKC

## SEPTEMBER

3 ALTUS  
10 TULSA  
14 OKC  
17 TULSA  
28 OKC

## DECEMBER

3 TULSA  
7 OKC  
10 ENID  
17 TULSA  
28 OKC

## OPPORTUNITIES TO EARN CEU'S

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### JULY 11-14, 2009

CATEGORY: 3a – ORNAMENTAL & TURF  
CEU'S: 1  
CATEGORY: 3b – INTERIOSCAPE  
CEU'S: 5  
CATEGORY: 3c – NURSERY/GREENHOUSE  
CEU'S: 7  
CATEGORY: 7a – GENERAL PEST  
CEU'S: 1  
CATGORY: 10 – DEMONSTRATION & RESEARCH  
CEU'S: 7  
SPONSOR: OHIO FLORICULTURE ASSOCIATION  
TOPIC: GREENHOUSE/INTERIOSCAPE PEST MANAGEMENT  
PLACE: COLUMBUS, OH  
CONTACT: MICHELLE MAZZA  
614.487.1117  
FEE: YES

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### JULY 14, 2009

CATEGORY: 3a – ORNAMENTAL & TURF  
CEU'S: 3  
CATEGORY: 10 – DEMONSTRATION & RESEARCH  
CEU'S: 3  
SPONSOR: OSU PSEP  
TOPIC: LAWN CARE MANAGEMENT  
PLACE: OKLAHOMA COUNTY EXTENSION OFFICE  
930 N. PORTLAND  
OKLAHOMA CITY, OK  
CONTACT: CHARLES LUPER FOR PROGRAM INFORMATION  
405.744.5531  
AGRICULTURE CONFERENCES FOR REGISTRATION  
405.744.6489  
FEE: YES

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### JULY 21, 2009

CATEGORY: 3a – ORNAMENTAL & TURF  
CEU'S: 3  
CATEGORY: 10 – DEMONSTRATION & RESEARCH  
CEU'S: 3  
SPONSOR: OSU PSEP  
TOPIC: LAWN CARE MANAGEMENT  
PLACE: MARRIOTT SOUTHERN HILLS  
1902 E. 71<sup>ST</sup>  
TULSA, OK  
CONTACT: CHARLES LUPER FOR PROGRAM INFORMATION  
405.744.5531  
AGRICULTURE CONFERENCES FOR REGISTRATION  
405.744.6489  
FEE: YES

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**AUGUST 5, 2009**

CATEGORY: 3a – ORNAMENTAL & TURF  
CEU'S: 3  
CATEGORY: 10 – DEMONSTRATION & RESEARCH  
CEU'S: 3  
SPONSOR: UNIVERSITY OF ARKANSAS  
TOPIC: TURFGRASS FIELD DAY  
PLACE: FAYETTEVILLE, AR  
CONTACT: AARON PATTON  
479.575.2612  
FEE: ?

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**AUGUST 18, 2009**

CATEGORY: 7a – GENERAL PEST  
CEU'S: 10  
CATEGORY: 7c – FUMIGATION  
CEU'S: 5  
CATEGORY: 10 – DEMONSTRATION & RESEARCH  
CEU'S: 7  
SPONSOR: IFC  
TOPIC: AIB/FISA RECERTIFICATION SEMINAR  
PLACE: KANSAS CITY, KS  
CONTACT: PAUL LAUGHLIN  
FEE: YES

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**AUGUST 19, 2009**

CATEGORY: 1a – AGRICULTURAL PLANT  
CEU'S: PENDING  
CATEGORY: 10 – DEMONSTRATION & RESEARCH  
CEU'S: PENDING  
SPONSOR: OSU EXTENSION  
TOPIC: SUMMER CROP TOUR  
PLACE: LAHOMA RESEARCH STATION  
LAHOMA, OK  
CONTACT: JEFF EDWARDS  
405.744.6130  
FEE: YES

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**SEPTEMBER 22-23, 2009**

CATEGORY: 3a – ORNAMENTAL & TURF  
CEU'S: 6  
CATEGORY: 5 – AQUATIC  
CEU'S: 5  
CATEGORY: 6 – RIGHT-OF-WAY  
CEU'S: 7  
CATEGORY: 10 – DEMONSTRATION & RESEARCH  
CEU'S: 7  
SPONSOR: OKVMA  
TOPIC: FALL CONFERENCE  
PLACE: SOUTHERN HILLS MARRIOTT  
TULSA  
CONTACT: KATHY MARKHAM  
918.256.9302  
FEE: YES

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**SEPTEMBER 24-25, 2009**

CATEGORY: 7a – GENERAL PEST  
CEU'S: PENDING  
CATEGORY: 7b – STRUCTURAL  
CEU'S: PENDING  
CATEGORY: 10 – DEMONSTRATION & RESEARCH  
CEU'S: PENDING  
SPONSOR: OPCA  
TOPIC: URBAN PEST MANAGEMENT  
PLACE: DOUBLETREE HOTEL DOWNTOWN  
616 WEST 7<sup>TH</sup> STREET  
TULSA, OK  
CONTACT: ROSA FISK  
405.685.2036  
FEE: YES

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**SEPTEMBER 24-25, 2009**

CATEGORY: AERIAL  
CEU'S: 2  
CATEGORY: 10 – DEMONSTRATION & RESEARCH  
CEU'S: 2  
SPONSOR: COLORADO AGRICULTURAL AVIATION ASSOCIATION  
TOPIC: FLY IN  
PLACE: LA JUNTA, CO  
CONTACT: DOLLE LEHRKAMP  
719-768.3367  
FEE: YES

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**NOVEMBER 4-5, 2009**

CATEGORY: 1a – AGRICULTURAL PLANT  
CEU'S: PENDING  
CATEGORY: 10 – DEMONSTRATION & RESEARCH  
CEU'S: PENDING  
SPONSOR: OARA  
TOPIC: AGEXPO  
PLACE: CLARION CONVENTION CENTER  
OKLAHOMA CITY, OK  
CONTACT: TAMMY MILLER  
580.233.9516  
FEE: YES

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**DECEMBER 15-16, 2009**

CATEGORY: 1a – AGRICULTURAL PLANT  
CEU'S: PENDING  
CATEGORY: 10 – DEMONSTRATION & RESEARCH  
CEU'S: PENDING  
SPONSOR: OSU EXTENSION  
TOPIC: WINTER CROP SCHOOL  
PLACE: WES WATKINS BUILDING  
STILLWATER, OK  
CONTACT: JEFF EDWARDS  
405.744.6130  
FEE: YES

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**ONGOING**

CATEGORY: 3a – ORNAMENTAL & TURF  
CEU'S: 4  
CATEGORY: 10 - DEMONSTRATION & RESEARCH  
CEU'S: 4  
SPONSOR: UNIVERSITY OF GEORGIA  
TOPIC: PRINCIPLES OF TURFGRASS MANAGEMENT  
PLACE: CORRESPONDENCE COURSE  
CONTACT: PHYLISS BREWER  
706.542.6692  
FEE: YES

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**ONGOING**

CATEGORY: 3a – ORNAMENTAL & TURF  
CEU'S: 2  
CATEGORY: 7a – GENERAL PEST  
CEU'S: 1  
CATEGORY: 7b - STRUCTURAL  
CEU'S: 1

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CATEGORY: 10 - DEMONSTRATION & RESEARCH  
CEU'S: 6  
CATEGORY: ALL CATEGORIES  
CEU'S: 2  
SPONSOR: CHRYSALIS EDUCATION & CONSULTING  
TOPIC: 0&T, GENERAL PEST & STRUCTURAL  
PLACE: HOLIDAY INN  
CONTACT: 3101 N. DALLAS PKW  
PLANO, TX  
DENNIS MALONEY  
806.468.8583  
FEE: YES

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**ELECTRONIC PROGRAMS**

CATEGORY: VARIOUS  
CEU'S: 1  
SPONSOR: UNIVAR  
TOPIC: VARIOUS  
PLACE: INTERNET – [WWW.PESTWEB.COM](http://WWW.PESTWEB.COM)  
CONTACT: JEFF SMITH  
916.371.7602  
FEE: NO

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**ONGOING**

CATEGORY: 3a – ORNAMENTAL & TURF  
CEU'S: 1  
CATEGORY: 8 – PUBLIC HEALTH  
CEU'S: 1  
CATEGORY: 10 - DEMONSTRATION & RESEARCH  
CEU'S: 1  
SPONSOR: UNIVAR  
TOPIC: A QUIET TICKING  
PLACE: PESTWEB [WWW.PESTWEB.COM](http://WWW.PESTWEB.COM)  
CONTACT: JEFF SMITH  
JEFF.SMITH@UNIVARUSA.COM  
FEE: NO

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**ELECTRONIC PROGRAMS**

CATEGORY: 3a – ORNAMENTAL & TURF  
CEU'S: 1  
SPONSOR: UNIVAR  
TOPIC: WEED CONTROL – THE HERBICIDES #604  
PLACE: INTERNET – [WWW.PESTWEB.COM](http://WWW.PESTWEB.COM)  
CONTACT: JEFF SMITH  
916.371.7602  
FEE: NO

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**ELECTRONIC PROGRAMS**

CATEGORY: 7a – GENERAL PEST  
CEU'S: 1  
SPONSOR: UNIVAR  
TOPIC: GOING GREEN & ORGANIC #207  
PLACE: INTERNET – [WWW.PESTWEB.COM](http://WWW.PESTWEB.COM)  
CONTACT: JEFF SMITH  
916.371.7602  
FEE: NO

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**ELECTRONIC PROGRAMS**

CATEGORY: 7a – GENERAL PEST  
CEU'S: 3  
CATEGORY: 7b - STRUCTURAL  
CEU'S: 1  
SPONSOR: WHITMIRE MICRO-GEN  
TOPIC: PRESCRIPTION TREATMENT UNIVERSITY  
PLACE: WHITMIRE WEB SITE  
CONTACT: JODI WILSON  
880.777.8570  
FEE: YES

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**ELECTRONIC PROGRAMS**

CATEGORY: VARIOUS  
CEU'S: VARIOUS  
SPONSOR: PEST NETWORK  
TOPIC: VARIOUS  
PLACE: PESTNETWORK.COM  
CONTACT: MEL YELL  
512.626.1645 CELL  
FEE: YES

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**ELECTRONIC PROGRAMS**

CATEGORY: 1a – AGRICULTURAL PLANT  
CEU'S: 1  
CATEGORY: 10 – DEMONSTRATION & RESEARCH  
CEU'S: 1  
SPONSOR: Pest Network  
TOPIC: GREENBUG MANAGEMENT  
PLACE: [www.pestnetwork.com](http://www.pestnetwork.com)  
CONTACT: CHARLES COLE  
979.732.0501  
FEE: YES

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**ELECTRONIC PROGRAMS**

CATEGORY: 1a – AGRICULTURAL PLANT  
CEU'S: 1  
CATEGORY: 10 – DEMONSTRATION & RESEARCH  
CEU'S: 1  
SPONSOR: SOUTHWEST FARM PRESS  
TOPIC: WEED RESISTANCE MANAGEMENT IN COTTON  
PLACE: INTERNET – [WWW.SOUTHWESTFARMPRESS.COM](http://WWW.SOUTHWESTFARMPRESS.COM)  
CONTACT: CHERYL OGLE  
559.322.6558  
FEE: NO

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**ELECTRONIC PROGRAMS**

CATEGORY: 1a – AGRICULTURAL PLANT  
CEU'S: 1  
CATEGORY: 10 – DEMONSTRATION & RESEARCH  
CEU'S: 1  
SPONSOR: SOUTHWEST FARM PRESS  
TOPIC: SPRAY DRIFT MANAGEMENT  
PLACE: [WWW.SOUTHWESTFARMPRESS.COM](http://WWW.SOUTHWESTFARMPRESS.COM)  
CONTACT: HARRY CLINE  
512.288.8288  
FEE: YES

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**ELECTRONIC PROGRAMS**

CATEGORY: VARIOUS  
CEU'S: VARIOUS  
SPONSOR: UNIVAR  
TOPIC: VARIOUS – GENERAL PEST CONTROL  
PLACE: [HTTP://WWW.PESTWEB.COM](http://WWW.PESTWEB.COM)  
CONTACT: VIC PRRALEZ  
888.755.5566  
FEE: YES

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